Patent Application of

Gerard E. Moy

For

HANGING FILE FOLDER BOX STORAGE SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority under 35 U.S.C. 119(e) on U.S. Provisional application No. 60/461,389 entitled HANGING FILE FOLDER BOX STORAGE SYSTEM, filed on April 9, 2003, by Gerard Moy.

FIELD OF INVENTION

This invention relates to storage devices, and more particularly, to a system for organizing and storing items of varying dimensional sizes and shapes in a hanging file system.

BACKGROUND OF THE INVENTION

Historically, hanging file folders have been used for the storage of documents in paper form. Their orientation within the hanging file cabinet or desk drawer has allowed for easy storage and indexing of a large quantity of documents in a relatively small space. Due to the hanging file drawer's popularity, many office desks are now manufactured with hanging file drawers configured therein. Nevertheless, there has risen a need for storage of other items which are typically used around an office environment. Throughout the remainder of this document, filing cabinets, desk drawers, or any other structure configured to accept hanging file folders will be hereinafter referred to as hanging file systems due to their similar utilitarian purpose.

l

Currently there are many types of office paraphernalia that generally comprise a list of items called "office supplies". These office supply items may include staples, tape dispensers, paper clips, pens, pencils, marking pens, or the like. These items are typically stored in the drawers of a conventional office desk. Because of the wide variation in the amount and type of office supply products used in today's office environment, and the fact that storage space available within a typical desk drawer is not infinite, the typical desk drawer can easily become cluttered. Moreover, in many cases there are types of office supplies that are important but are seldom used. In this case, it would be advantageous to store such devices in a location which does not contribute to the inherent clutter in a functional office environment, yet remains easily accessible. In a larger office environment containing a conglomeration of several offices for multiple office personnel, typically there exists a central repository for the storage of office supplies for use by all members of the office complex. Typically, these office supplies are simply laid in a large drawer with no inherent means of keeping the office supplies organized.

As before described, although file folder systems have provided an excellent means for the efficient storage of documents, there has heretofore been no viable means for the storage of office supplies or other similar type items therein. Currently there are storage boxes available for the storage of items of varying size, however none of the existing art discloses storage boxes of predetermined dimensions of width and depth which is optimally sized to fit into a standard hanging file system. What is needed is an enclosure for the storage of office products such as pens, pencils, tape, paper clips, or the like which can make use of the inherently efficient storage capability of a file folder system. This device-should-be-sized-to-fit into any standard sized hanging file system including letter

and legal sized file folder structure. Partitions could be provided within the enclosure in order to define multiple compartments for the storage of items of variable size. These partitions could also be user adjustable so that items of varying dimensions can be efficiently stored within a hanging file system.

SUMMARY OF THE INVENTION AND OBJECTIVES

The present invention provides a solution to these needs via a hanging file storage box for the storage of a plurality of items of varying size in a hanging file system. The storage box is generally rectangular in shape comprising a box portion having a bottom panel, front and rear sidewalls, and opposing left and right sidewalls to define a rectilinear chamber therein. Each of the front and rear sidewalls, and opposing left and right sidewalls has an upper edge terminating at an open top of the box portion. A generally flat lid is hingibly attached to the rear sidewall for selectively covering and uncovering the open top of the box portion. In addition, a latching means is provided to selectively maintain the lid in a closed position adjacent to the open top. Protrusions or hangers may extend from the exterior surface of the opposing sidewalls proximate the front edge thereof in order to suspend the storage box over the bars or slots of the hanging file system.

A plurality of partitions may also be provided to segregate the rectilinear chamber into smaller compartments for the efficient storage of different types of items of varying size. A preferred embodiment has a plurality of fixed partitions which extend substantially the full depth (from front wall to rear wall) of the box and positioned in parallel relation to

the left and right sidewalls. Each of the fixed partitions has a lower edge that is attached to the upper surface of the bottom panel and whose side edges are attached to the inner surface of the front and rear sidewalls. The upper edge of each fixed partition terminates at the open top of the box portion. Alternatively, the lateral surfaces of the fixed partitions as well as the inner surface of the end sidewalls may contain slot means for slidably receiving selectively removable partitions therein. Preferably, the fixed partitions are positioned equidistant apart within the chamber in order that the removable partitions of a common size may be utilized. Alternatively, the fixed partitions may extend substantially the full width (from left sidewall to right sidewall) of the box portion and positioned in parallel relation to the front and rear sidewalls. Yet another alternative embodiment contemplates fixed partitions which extend depthwise in addition to fixed partitions which extend widthwise within the box portion. The broad array of storage boxes with varying partition configurations form a storage system whereby many types of items of varying size and shape may be efficiently stored due to the myriad of available dimensional compartment sizes made possible by the varying fixed partition configurations available coupled with the judicious placement of removable partitions therein.

Other alternative embodiments contemplate hangers which are selectively removable from the box portion as well as hangers which may be slidably or rotatably attached to the box portion.

It is therefore a primary object of the present invention to provide a hanging file storage box system for the storage of a plurality of items of varying size and shape in a hanging file system.

A related object of the present invention is to provide an efficient storage system for various office supplies which are used in an office environment.

Another related object of the present invention is to provide an efficient storage system for other items such as jewelry, coins, keys, buttons, sewing needles, nails, nuts and bolts, or the like in a hanging file system.

Another object of the present invention is to provide a file folder box storage device having hangers that are either fixed, selectively removable, or slidably or rotatably movable to a recessed position within the rectilinear chamber of the box portion in order to allow storage in other non-hanging file system storage positions.

Another object of the present invention is to provide a file folder box storage device having predetermined outer dimensions which are optimally sized to fit into a standard hanging file system.

A further object of the present invention is to provide a file folder box storage system that is inexpensive to produce and therefore, inexpensive to the end user.

A further object of the present invention is to provide a file folder box storage system that is easily adapted to fit into any structure which is designed to contain hanging file folders including file cabinets, desk drawers, file folder boxes, or the like.

A further object of the present invention is to provide a file folder box storage system having indicia indicating means on the upper surface of the storage box in order to allow easy indexing and identification while in operative engagement within a hanging file system.

A further object of the present invention is to provide a file folder box storage system that is adaptable to any commonly accepted size of file storage system including letter and legal sizes.

These and other objects of the present invention will become readily apparent to those familiar with the construction and use of file storage systems and will become apparent in the following portions of the specification, wherein the detailed description is for the purpose of fully disclosing preferred embodiments of the invention without placing limitations thereon.

BRIEF DESCRIPTION OF THE DRAWINGS

For a more complete understanding of the present invention, and the advantages thereof, reference is now made to the following descriptions taken in conjunction with accompanying drawings, in which:

- FIG. 1 is a perspective view of one preferred embodiment of the present invention shown with the lid in the open position.
- FIG. 2 is a perspective view of the embodiment of FIG. 1 shown with the lid in the closed position.
- FIG. 3 is an enlarged partial perspective view of the embodiment of FIG. 1 showing one of the removable partitions in an elevated position.
- FIG. 4 is a plan view of the embodiment of FIG. 1 shown with the lid in the open position.
- FIG. 5 is a perspective view of an alternative embodiment of the present invention shown with the lid in the open position.

- FIG. 6 is a plan view of the embodiment of FIG. 5 shown with the lid in the open position.
- FIG. 7 is a perspective view of another alternative embodiment of the present invention shown with the lid in the open position.
- FIG. 8 is a plan view of the embodiment of FIG. 7 shown with the lid in the open position.
- FIG. 9 is a perspective view of another alternative embodiment of the present invention having selectively removable hangers.
- FIG. 10 is an enlarged partial perspective view of the embodiment of FIG. 9 showing one of the selectively removable hangers disengaged from the side of the box portion.
- FIG. 11 is an enlarged partial side view of the embodiment of FIG. 9 showing a removable hanger which is selectively engaged into a slot on the side of the box portion.
- FIG. 12 is an enlarged partial front view of the embodiment of FIG. 9 with the lid removed in order to show the recessed box-like cavity within the rectilinear chamber.
 - FIG. 13 is a side view of the removable hanger of the embodiment of FIG. 9.
- FIG. 14 is a perspective view of another alternative embodiment of the present invention having slidably movable hangers which are in the extended position.
- FIG. 15 is partial side cut-away view taken at 15 -15 of the embodiment of FIG. 14.
 - FIG. 16 is a side view of the slidably movable hanger of the embodiment of FIG.

14.

- FIG. 17 is a plan view of the slidably movable hanger of the embodiment of FIG. 14.
- FIG. 18 is a partial side view of the embodiment of FIG. 14 with the slidable hangers in the extended position and the lid removed in order to show the arrangement of the hangers and the rails within the rectilinear chamber.
- FIG. 19 is a partial side view of the embodiment of FIG. 14 with the slidable hangers in the retracted position and the lid removed in order to show the arrangement of the hangers and the rails within the rectilinear chamber.
- FIG. 20 is a perspective view of another alternative embodiment of the present invention having rotatably movable hangers which are in the extended position.
- FIG. 21 is a partial perspective view of the embodiment of FIG. 20 showing one of the rotatable hangers disengaged from the side of the box portion.
- FIG. 22 is a side view of one of the rotatable hangers of the embodiment of FIG. 20.
 - FIG. 23 is a backside view of the rotatable hanger of FIG. 22.
- FIG. 24 is a partial side cut-away view taken at 24 - 24 showing the arrangement of the components of the hanger enclosure of the embodiment of FIG. 20.
- FIG. 25 is a partial side view of the embodiment of FIG. 20 showing one of the rotatable hangers engaged within the hanger enclosure and in the extended position.
- FIG. 26 is a partial side view of the embodiment of FIG. 20 showing one of the rotatable hangers engaged within the hanger enclosure and in the retracted position.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings, FIGS. 1-26 represent numerous embodiments and designs of a file folder storage box used for the efficient storage of a plurality of items of varying size and shape in a hanging file system. Each of the various designs, however, utilize the novel feature of a rectangular box structure having various divider configurations for the storage of various items and having hangers thereon for suspension over the bars of a typical hanging file system. As shown in FIGS. 1 through 4, a hanging file folder box embodying a preferred embodiment of a device according to the instant invention is designated generally by reference numeral 10. The file folder storage box 10 is generally shown having a box portion 12, a generally flat lid 24, and hangers 60a-60d for suspension of the storage box in a hanging file folder system. The box portion 12 includes a bottom panel 14 and integrally extending front 16, rear 18, left 20, and right 22 sidewalls. The upper edge of the front 16, rear 18, left 20, and right 22 sidewalls define an open top of the box portion 12. The upper edge of the rear sidewall 18 is rotatably connected to the adjacent rear edge 26 of the lid 24 via a pair of hinges 30a and 30b. Optionally, the hinge may be a "living hinge" or a continuous piano-type hinge. A pair of clasps 34a and 34b that are hingibly attached to the front edge 28 of the lid, together with a pair of hooks 36a and 36b cooperate together to form latches in order to selectively maintain the lid 24 in a closed position as shown in FIG. 2. Alternatively, the latches may be of any well known construction. It should be appreciated that the latches for the lid and box portion can be constructed in many ways as is known to persons of ordinary skill in the art.

The bottom panel 14, together with the sidewalls (16, 18, 20, and 22) define a rectilinear chamber for the storage of items therein. A plurality of fixed partitions 40a-40e are included in order to divide the rectilinear chamber into a plurality of compartments. As is shown in FIG. 1, each partition extends the full length of the of the rectilinear chamber from front sidewall to rear sidewall. Each partition's front lateral edge and rear lateral edge is integrally attached to the inner surface of the front sidewall 16 and rear sidewall 18, respectively. Likewise the bottom edge of each fixed partition 40a-40e is integrally attached to the inner surface of the bottom panel 14. As used throughout this specification and the appended claims, the term "inner surface" refers to any surface that exists adjacent to the rectilinear chamber and "outer surface" refers to any surface disposed away from the rectilinear chamber. The upper edge of each partition 40a-40e terminates at the open top of the box portion. Thus, when the lid is selectively moved to the closed position as is shown in FIG. 2, the upper edge of each partition remains in close proximity to the lid in order to maintain small items such as paper clips, coins, jewelry, or the like in their selected compartments. Although the present embodiment has been disclosed using five fixed partitions, it is to be understood that the hanging file folder box may be constructed with any number of fixed partitions without departing from the spirit and scope of the invention.

In addition to fixed partitions, a plurality of removable partitions 42 are provided in order to allow the user to optimally configure the dimensions of compartments within the rectilinear chamber. Each removable partition comprises a rectangular portion having a bottom edge 44, top edge 46, and two lateral edges 48a and 48b. Two members 50a and 50b defining an oval, solid cross-section are each integrally attached to the lateral edges

48a and 48b along their entire extent. On both lateral surfaces of the fixed partitions 40a-40e as well as the inner surface of the left 20 and right 22 sidewalls have several pairs of slots 52 formed within protrusions 54 to slidably receive the members (50a and 50b) of the removable partitions thereto as is shown in FIG. 3. Each slot 52 generally comprises an oval shaped hole which extends from the open top to the inner surface of the bottom panel 14. The oval shaped hole is slightly larger in dimension than members 50a and 50b and is disposed in the protrusion 52 such that the members 50a and 50b are entrapped upon insertion thereto. The bottom edge 44 is positionable on the inner surface of the bottom panel 14 and the top edge 46 is adjacent the open top of the box portion. The width of each removable partition 42 defined by the length from member 50a to member 50b is of predetermined length sufficient to span each compartment within the rectilinear chamber. In this manner each compartment formed by the fixed partitions may be further divided by the user into smaller compartments for the storage of items therein. The rectangular portion and members 50a-50b may be integrally formed of plastic or the like type material. It is to be understood, however that the removable partitions are optional; the implementation of removable partitions is not necessary for the proper operation of the instant invention. In addition, the aforementioned embodiment specifies the use of members 50a and 50b of oval cross-section, however it is well known in the art that other geometrical shapes may be used.

As stated herein, the width W and depth D of the storage box are optimally chosen for easy insertion and removal as well as to utilize the maximum space available in any hanging file system, preferably hanging file systems designed for letter (8.5 X 11 inch) documents or legal (8.5 x 14 inch) documents. The width W of the storage box is defined

as the length of the outer surface of the front 28 and rear 26 edges of the lid and the depth D of the storage box is defined as the length of the side edges 32a and 32b of the lid. The height H of the storage box may be any predetermined length, preferably the height chosen will be sufficient to allow adequate storage room for items of various shapes and sizes as well as sufficiently thin in order to allow easy access to all the contents contained therein. The height of the storage box is defined as the length from the bottom panel 14 to the outer surface of the lid when in the closed position.

The instant invention may be suspended over the bars or ledges of a hanging file system via protrusions or hangers (60a, 60b, 60c, and 60d) which extend from the outer surface of the left sidewall 20, right sidewall 22, left edge of lid 32a, and right edge of lid 32b proximate the front edge thereof respectively. Each hanger 60a-60d has a depression 62 in its rearward edge thereof as shown in FIG. 4 in order to rest stably over the bars or ledges of the file system while in the storage position. Although not necessary to the operation of the instant invention which is optimally sized to fit into a standard hanging file system, the hangers provide a means to stably maintain the storage box in an upright position therein. The bottom panel 14, the sidewalls (16, 18, 20, 22), fixed partitions 40a-40e, hooks 36a-36b, protrusions 54, and hangers 60a-60d may be integrally formed of plastic or the like type material. In addition, the lid 24, and clasps 34a-34b may be integrally formed of plastic or the like type material.

A label 64 is also provided which allows placement of indicia thereon for ease of identification of the contents of the storage box while in operative engagement within a hanging file system. The outer surface of the label may consist of any markable surface, preferably-the-surface of the label has an erasable marking surface defined by a smooth,

non-porous surface which is designed to be written on using a dry-erase marker such as is well known in the art. The label is made of any material, preferably polystyrene and is permanently attached to the outer surface of the front sidewall 16 using any suitable adhesive.

An alternative embodiment 70 of the present invention is shown in FIG. 5 through 6 in which a hanging file folder storage box has fixed partitions 72a-72d which extend the full length of the rectilinear chamber from left sidewall 20 to right sidewall 22. The bottom panel 14, hinges 30a-30b, lid 24, clasps 34a-34b, hooks 36a-36b, protrusions 54 having slots 52 disposed therein, label 64, and hangers 60a-60d are similar in design and function to the embodiment of FIGS. 1-4. The embodiment of FIG. 5 differ from that of FIGS. 1-4 in that each fixed partition extends the full length of the box portion and whose left lateral edge and right lateral edge is integrally attached to the inner surface of the left 20 and right 22 sidewall, respectively. The left 20 and right 22 sidewalls are similar to the embodiment of FIGS. 1-4 except that the inner surfaces thereof do not have protrusions 54 for the receipt of the removable partitions. Conversely, the front 16 and rear 18 sidewalls are similar to the embodiment of FIGS. 1-4 except that the inner surfaces thereof have protrusions 54 containing slots 52 disposed therein for the receipt of removable partitions. Although the present embodiment has been disclosed using four fixed partitions, it is to be understood that the hanging file folder box may be constructed with any number of fixed partitions without departing from the spirit and scope of the invention.

The embodiment of FIGS. 5 and 6 also has removable partitions 42 which are similar in design and function to the embodiment of FIGS. 1-4 in that each compartment created by fixed partitions 72a-72d may be further sub-divided into smaller compartments

which are customizable by the user. The removable partitions 42 of the embodiment of FIGS. 5 and 6 differ only in that the predetermined width of the removable partition 42 defined by the length from member 50a to member 50b is of predetermined length sufficient to span each compartment created by fixed partitions 72a-72d. Like the embodiment of FIGS. 1-4, the fixed partitions 72a-72d are preferably positioned equidistant apart within the rectilinear chamber in order that the removable partitions of a common size may be utilized.

Another alternative embodiment 80 of the present invention is shown in FIG. 7 through 8 in which a hanging file folder storage box has widthwise oriented fixed partitions 82a-82d which extends parallel to the front 16 and rear 18 sidewalls in addition to one depthwise oriented fixed partition 84 which extends parallel to the left 20 and right 22 sidewalls. The bottom panel 14, hinges 30a-30b, lid 24, clasps 34a-34b, hooks 36a-36b, protrusions 54 having slots 52 disposed therein, label 64, and hangers 60a-60d are similar in design and function to the embodiment of FIGS. 1-4. The embodiment of FIG. 7 and 8 differ from that of FIGS. 1-4 in that a fixed partition 84 extends the full depth of the rectilinear chamber and whose front and rear lateral edges are integrally attached to the inner surface of the front 16 and rear 18 sidewalls respectively. In addition, a plurality of fixed partitions 82a-82d extend from the inner surface of the right 22 sidewall to the surface of the fixed partition 84 and is integrally attached thereto at their left and right lateral edges. The lower edges of the fixed partitions 84 and 82a-82d are integrally attached to the inner surface of the bottom panel 14 and the upper edges thereof are adjacent to the open top. The left 20 and right 22 sidewall is similar to the embodiment of FIGS. 1-4 except that the inner surface thereof does not have protrusions 54 containing

slots 52 for the receipt of the removable partitions. Conversely, the front 16 and rear 18 sidewalls are similar to the embodiment of FIGS. 1-4 except that the inner surfaces thereof have protrusions 54 with slots 52 disposed therein for the receipt of removable partitions. Although the present embodiment has been disclosed using one fixed partition which extends the entire depth of the rectilinear chamber and four fixed partitions which extend widthwise, it is to be understood that the instant embodiment is only an example of a hanging file storage box having fixed partitions of varying orientation and other combinations of fixed partitions having varying orientation may be implemented without departing from the spirit and scope of the invention.

The embodiment of FIGS. 7 and 8 also has removable partitions 42 which are similar in design and function to the embodiment of FIGS. 1-4 in that each compartment created by fixed partitions 82a-82d may be further sub-divided into smaller compartments which are customizable by the user. The removable partitions 42 of the embodiment of FIGS. 7 and 8 differ only in that the predetermined width of the removable partition 42 defined by the length from member 50a to member 50b is of predetermined length sufficient to span each compartment created by fixed partitions 82a-82d.

Another alternative embodiment 90 of the present invention is shown in FIG. 9 through 13 in which a hanging file folder storage box has removable hangers 92a-92b which can be removably attached to the left 20 and right 22 sidewalls for stably maintaining the storage box in an upright position within a hanging file system. The bottom panel 14, hinges 30a-30b, lid 24, clasps 34a-34b, hooks 36a-36b, protrusions 54 having slots 52 disposed therein, and label 64 are similar in design and function to the embodiment of FIGS. 7-8. The embodiment of FIGS. 9 through 13 differ from that of

FIGS. 7-8 in that only two removable hangers 92a-92b are used for suspension in a hanging file system. Because the construction of the left 92a and right 92b hangers as well as the left 102a and right 102b hanger receptacles are essentially identical, only the right hanger 92b and right hanger receptacle 102b will be described. As shown, the removable hanger 92b which is made of any conventional material, preferably plastic, has a base 94, and an arm 96 having a depression 98 for resting stably on the bars or ledges of a hanging file system. Slots 100 extend vertically on both sides of the hanger 92b proximate the base 94 and serve to snugly retain the removable hanger 92b on the side of the box portion when in the installed position. A removable hanger receptacle 102b exists on the right 22 sidewall proximate the front 16 sidewall and is sized to accept the base 94 therein. The removable hanger receptacle 102b has a boxlike member 104 integrally attached to the inner surface of the box portion and an insertion hole 106 at the outer surface of the box portion which is slightly larger than the cross-sectional area of the base 94. Thus the hanger's base 94 can easily be inserted into the receptacle 102b at the insertion hole 106. Two interlock walls 108 which are coplanar with the sidewall 22 exist at both sides of the receptacle 102b and are engaged into the slots 100 when the removable hanger 92b is moved upward following insertion into the hole 106. FIG. 9 shows both of the removable hangers 92a-92b in the installed position. The removable hanger 92b may be removed from the receptacle 102b by reversing the steps described above; slide the removable hanger 92b till the slots 100 thereof are entirely disengaged from the interlock walls 108, then remove the hanger 92b from the receptacle 102b. FIG. 10 shows the removable hanger 92b in the un-installed position.

Another alternative embodiment 110 of the present invention is shown in FIG.14 through 19 in which a hanging file folder storage box has retractable hangers 112a-112b which can be retracted into the rectilinear chamber via user manipulation when stably maintaining the storage box in an upright position within a hanging file system is not needed or desired. The bottom panel 14, hinges 30a-30b, lid 24, clasps 34a-34b, hooks 36a-36b, protrusions 54 having slots 52 disposed therein, and label 64 are similar in design and function to the embodiment of FIGS. 7-8. The embodiment of FIGS. 14 through 19 differ from that of FIGS. 7-8 in that only two retractable hangers 112a-112b are used for suspension in a hanging file system. Because the construction of the left 112a and right 112b retractable hangers as well as the left 122a and right 122b hanger enclosures are essentially identical, only the right hanger 112b and right hanger enclosure 122b will be described. As shown in FIGS. 16 and 17, the retractable hanger 112b constructed of any conventional material, preferably plastic, defining a T-shaped, solid cross-section having a proximal 114 and distal 116 end includes a thumb-knob 118b attached to the top proximate the proximal end 114 thereof. The retractable hanger 112b is tapered at its distal end 116 and has a depression 120 proximate thereof for resting stably on the bars or ledges of a hanging file system. The retractable hanger 112b is slidably received within the enclosure 122b and held in close proximity to the inner surface of the front panel 16 via a pair of elongated L-shaped support rails 124a-124b as shown in FIG. 15. The support rails 124a-124b are integrally molded with the box portion and extend from the right side panel 22 to a position 126 which allows the proximal end 114 of the retractable hanger to remain within its grasp throughout the available movement thereof. The rails 124a-124b are sufficiently pliable in order to allow the retractable hanger 112b to be snapped into

operative position during manufacture. FIG. 15 is a partial side cut-away view showing how the retractable hanger 112b is slidably held in within the enclosure 122b proximate the inner surface of the front side panel 16. A T-shaped hole 128 exists in the right side panel 22 which is slightly larger than the cross-sectional area of the retractable hanger 112b for allowing reciprocal movement thereof in and out of the rectilinear chamber. The thumb-knob 118b protrudes through a rectangular shaped hole 130 thereby allowing slidable access of the retractable hanger 112b to a user. For storage in a hanging file system, the retractable hangers 112a and 112b may be slidably moved to the extended position by pressing the thumb-knobs 118a and 118b outwardly (away from each other). FIG. 18 shows the retractable hangers 112a and 112b in the extended position. However, if storage in a hanging file system is not desired, the hangers 112a and 112b may be retracted into the rectilinear chamber by pressing inwardly (towards each other) on the thumb-knobs 118a and 118b. FIG. 19 shows the retractable hangers 112a and 112b in the retracted position.

Another alternative embodiment 140 of the present invention is shown in FIG.20 through 26 in which a hanging file folder storage box has rotatable hangers 142a-142b which can be rotated into the rectilinear chamber via user manipulation when stably maintaining the storage box in an upright position within a hanging file system is not needed or desired. The bottom panel 14, hinges 30a-30b, lid 24, clasps 34a-34b, hooks 36a-36b, protrusions 54 having slots 52 disposed therein, and label 64 are similar in design and function to the embodiment of FIGS. 7-8. The embodiment of FIGS. 20 through 26 differ from that of FIGS. 7-8 in that only two retractable hangers 142a-142b are used for suspension in a hanging file system. Because the construction of the left 142a and right

142b rotatable hangers as well as the left 160a and right 160b rotatable hanger enclosures are essentially identical, only the right hanger 142b and right hanger enclosure 160b will be described. As shown in FIGS. 22 and 23, the rotatable hanger 142b constructed of any conventional material, preferably plastic, comprises a planar shaped arm member 144 defining an outer 146 and inner 148 surface and a tongue 150 which is attached to the inner surface 148 and depends from the arm member 144 while in the extended position. The hanger 142b also has a semi-circular bushing 152 which is attached to the arm member 144 via two wedge shaped members 154. A rotatable hanger enclosure 160b comprises a boxlike structure 162, and an arbor 164 that is integrally molded to the inner surface of the right sidewall 22 of the box portion. The depth of the box-like structure 162 is chosen such that the tongue 150 abuts the rear surface thereof while in the retracted position. Likewise, the width of the box-like structure is chosen to be slightly larger than the outer dimensions of the planar shaped arm member 144 such that the outer surface 146 of the arm member 144 is essentially flush with the outer surface of the right sidewall 22 while in the retracted position. The bushing 152 has a slot 156 configured therein which is slightly less than 180 degrees in arcuate length in order to provide a snap fit onto the arbor 164, thereby providing for reciprocal rotational movement between an extended position and a retracted position. Thus if the hanger 142b is initially in the extended position as shown in FIG. 25, the hanger 142b may be moved to the retracted position by pressing downward proximate the lower edge 156 of the planar shaped arm member 144. Conversely if the hanger 142b is initially in the retracted position as shown in FIG. 26, the hanger 142b may be moved to the extended position by pressing inwardly (into the box portion) proximate the top edge 158 of the outer surface 146 of the planar shaped arm member 144.

The combination of the embodiments 10, 70, and 80 coupled with the various hanger types as disclosed in embodiments 90, 110 and, 140 together form a system for the storage of a wide variety of items of differing size and shape in a file storage system. The present invention provides for a broad array of compartment sizes available via the combination of differing fixed partition configurations available coupled with removable partitions to further allocate smaller compartments therein. In using the hanging file folder box storage system, a storage box is chosen by the user which most completely satisfies the compartment arrangement for the items that the user wishes to store in a hanging file system. Although not necessary, the user may also further sub-divide each compartment into a plurality of smaller compartments using removable partitions. If so desired, the user may insert one or more removable partitions by guiding the members 50a-50b of each removable partition into a preselected opposing pair of slots until the lower edge 44 of the partition is positioned on the inner surface of the bottom panel 14. Next, the compartments are populated with the items to be stored and the lid of the box moved to the closed position. After the lid is moved to the closed position, the clasps 36a-36b may be releasably engaged on the hooks 34a-34b. Next, the storage box is placed in a filing drawer of a hanging file system by positioning the hangers over the bars or slots of the filing drawer. It is important to note that the user is not limited to the use of only one storage box, several storage boxes may be utilized in combination in order to sufficiently store all desired items. In addition, the wide variability of compartment sizes made possible via the instant invention allows for the efficient storage of a very wide variety of items in an organized manner.

The present invention may be embodied in other specific forms without departing from the spirit or scope of the invention. For example, it is well known in the art that there are other fixed partition configurations besides the embodiments described above. There are a myriad of depthwise and widthwise oriented fixed partitions, or any combination thereof, which could be implemented without departing from the spirit and scope of this invention. Therefore, the described embodiments are to be considered in all respects only as illustrative and not restrictive. The scope of the invention is, therefore, indicated by the appended claims rather than by the foregoing description. All changes which come within the meaning and range of equivalency of the claims are to be embraced within their scope.